

## ATTACHMENT J8

# Pittsburgh 171st ARW, PA ANG Wastewater Collection System

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## Table of Contents

PITTSBURGH 171ST ARW, PA ANG WASTEWATER COLLECTION SYSTEM.....	I
<b>J8 PITTSBURGH 171ST ARW, PA ANG WASTEWATER COLLECTION SYSTEM.....</b>	<b>I</b>
J8.1 PITTSBURGH 171ST ARW OVERVIEW .....	1
J8.2 WASTEWATER SYSTEM DESCRIPTION .....	1
<i>J8.2.1 Wastewater System Fixed Equipment Inventory .....</i>	<i>1</i>
J8.2.1.1 Description .....	2
J8.2.1.2 Inventory .....	2
<i>J8.2.2 Wastewater System Non-Fixed Equipment and Specialized Tools.....</i>	<i>3</i>
<i>J8.2.3 Wastewater System Manuals, Drawings, and Records .....</i>	<i>4</i>
J8.3 SPECIFIC SERVICE REQUIREMENTS.....	4
J8.4 CURRENT SERVICE ARRANGEMENT .....	4
J8.5 SECONDARY METERING .....	4
J8.6 MONTHLY SUBMITTALS .....	4
J8.7 INFILTRATION AND INFLOW (I&I) PROJECTS.....	5
J8.8 SERVICE AREA .....	5
J8.9 OFF-INSTALLATION SITES .....	5
J8.10 SPECIFIC TRANSITION REQUIREMENTS.....	6
J8.11 GOVERNMENT RECOGNIZED SYSTEM DEFICIENCIES .....	6

## List of Tables

Fixed Inventory .....	2
Spare Parts .....	3
Specialized Vehicles and Tools.....	3
Manuals, Drawings, and Records .....	4
Service Connections and Disconnections.....	6
System Deficiencies .....	6

# J8 Pittsburgh 171st ARW, PA ANG Wastewater Collection System

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## J8.1 Pittsburgh 171st ARW Overview

The Pennsylvania Air National Guard (PA ANG) 171st Air Refueling Wing (ARW) is located at the Pittsburgh International Airport, approximately 16 miles northwest of downtown Pittsburgh in Allegheny County, Pennsylvania. The base is accessible from US Highway 60 at the McClaren Road exit. The 171<sup>st</sup> ARW mission is to provide aerial in-flight refueling and passenger/cargo transportation. The base currently has 20 KC-135 Air Refueling Tankers. The activities of the 171<sup>st</sup> ARW are estimated to have an economic impact of more than \$50 million on the Pittsburgh area.

The 171st ARW base employs 418 full-time personnel during regular weekday shifts. Of the 418 personnel, 293 are technicians, 116 are Active Guard Reserve full-time (AGR), and 9 are state employees. Traditional guardsmen add 1034 personnel that are on the installation during their respective Unit Training Assembly (UTA) weekend. The UTA weekend occurs one weekend each month for each unit.

The 171st ARW occupies 176 acres leased from the Allegheny County Department of Aviation. Construction of the base began in 1949 for the 112<sup>th</sup> Fighter Group. After several unit and mission changes at the PA ANG, the 171<sup>st</sup> moved to the current base in 1964. The 171<sup>st</sup> maintains approximately 52 buildings and structures with the breakdown being 40 industrial buildings and 12 administrative buildings. Major additions or deletions to the installation are not planned at this time.

## J8.2 Wastewater System Description

### J8.2.1 Wastewater System Fixed Equipment Inventory

The 171st ARW wastewater system consists of all appurtenances physically connected to the collection system from the point of demarcation defined by the Right of Way. The system may include, but is not limited to, pipelines, manholes, lift stations, valves, and controls. The actual inventory of items sold will be in the bill of sale at the time the system is transferred. The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the system. The Government makes no representation that the inventory is accurate. The Contractor shall base its proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any service charge adjustments based on the accuracy of the following description and inventory.

Specifically excluded from the wastewater system privatization are:

- The Oil/Water Separators are not part of this contract.

#### J8.2.1.1 Description

Wastewater generated by the 171<sup>st</sup> ARW is carried off Base through an 8-inch sewer main in the southeast corner of the Base and through an 8-inch sewer line leaving the Guard Shack. Both lines enter the Moon Township Municipal Authority's (MTMA) sanitary sewer collection system at MTMA owned manholes. Wastewater is not metered prior to entering the MTMA sanitary sewer system; instead the Base is billed for sewage treatment fees based upon 100 percent of its potable water consumption.

The 171<sup>st</sup> ARW wastewater collection system consists primarily of gravity-flow pipe with two lift stations. The collection system consists of laterals, oil/water separators, and collector mains. The oil/water separators remove industrial wastes from the water before it enters the sanitary sewer system, but are not part of this contract. Service laterals are typically 4 to 6-inches in diameter, and mains range from 6 to 8-inches in diameter. The depth of cover over wastewater collection pipes generally varies from 4 to 10 feet. Although, the actual depth may vary. Most of the system consists of the original vitrified clay pipe installed in the 1960s. Many of the sewer lines on the installation have been examined by the use of TV equipment and the video tapes of that examination will be available in the Technical Library and provided to the privatizing contractor.

Inspections with the video tapes show that many of the manholes require maintenance as result of age. The major problems are need for wall repairs, ring repairs, and re-grouting.

The Base has two medium size lift stations. The first lift station supports only Building 320 and was constructed in 1996. This lift station is operated when there is an AFFF fire suppression dump and during system tests. The second lift station is located near Building 310. This facility moves wastewater from buildings at the southeast corner of the base to an Air Force owned manhole which drains by gravity. The pumps and controls for the second lift station were replaced in 2003. Other overhauls and equipment repairs may still be needed.

#### J8.2.1.2 Inventory

**Table 1** provides a general listing of the major wastewater system fixed assets for the 171<sup>st</sup> ARW wastewater system included in the sale.

**TABLE 1**  
Fixed Inventory  
*Wastewater Utility System 171<sup>st</sup> ARW, PA ANG*

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
<u>Piping</u>				
Vitrified Clay Pipe	4.0	3,380	LF	1960
Vitrified Clay Pipe	6.0	1,510	LF	1960
Vitrified Clay Pipe	8.0	2,705	LF	1960
Vitrified Clay Pipe	6.0	200	LF	1975

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
PVC Pipe	6.0	600	LF	1996
PVC Pipe	6	140	LF	2003
PVC Pipe	8	690	LF	2003
<u>Precast Manholes</u>				
Precast Manholes	48x72"	21	EA	1960
Precast Manholes	48x96"	10	EA	1960
Precast Manholes	48x96"	4	EA	2003
Precast Manholes	48x96"	4	EA	1985
<u>Lift Stations</u>				
Wet Well	-	1	EA	1985
Pumps and Controls (2- 7 ½ HP pumps)	-	1	EA	2003
Bldg 320 Wet Well	-	1	EA	1996
Bldg 320 Pumps and Controls (2 – 7 ½ HP pumps)	-	1	EA	1996

**Notes:**

PVC = Polyvinyl Chloride

LF = Linear Feet

EA = Each

## J8.2.2 Wastewater System Non-Fixed Equipment and Specialized Tools

**Table 2** lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

**TABLE 2**

Spare Parts

Wastewater System 171st ARW, PA ANG

Qty	Item	Make/Model	Description	Remarks
None				

**TABLE 3**

Specialized Vehicles and Tools

Wastewater System 171st ARW, PA ANG

Description	Quantity	Location	Maker
None			

### J8.2.3 Wastewater System Manuals, Drawings, and Records

Table 4 lists the manuals, drawings, and records that will be transferred with the system.

**TABLE 4**  
Manuals, Drawings, and Records  
Wastewater System 171st ARW, PA ANG

Qty	Item	Description	Remarks
1 Set	Wastewater Collection Drawings	Wastewater Collection System Drawings	
1	Video Review of System	Video tapes produced for 171st to show condition of wastewater collection system.	

## J8.3 Specific Service Requirements

The service requirements for the 171st ARW wastewater system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the 171st ARW wastewater system and are in addition to those found in Section C. If there is a conflict between requirements described below and Section C, the requirements listed below take precedence over those found in Section C.

- Provide marks on the ground to show locations of wastewater distribution lines on an as needed basis as other entities request. Mark utilities in the field to show location and depth.

## J8.4 Current Service Arrangement

The Moon Township Municipal Authority treats the 171<sup>st</sup> ARW's wastewater. The 171<sup>st</sup> ARW sewer discharge is billed based on 100 percent of the Base's water usage. The FY 2002 annual usage was 6,400 kgal. The average monthly usage was 533 kgal with a maximum occurring in January with 947 kgal and the minimum occurring in November with 367 kgal.

## J8.5 Secondary Metering

There are no meters associated with this wastewater collection system.

## J8.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25<sup>th</sup> of each month for the previous month. Invoices shall be submitted to:

Department of Military Affairs

State Armory Board  
Federal Service Contracts  
Building O-47  
Annville, PA 17003-5002  
717-772-7002

2. Outage Report. The Contractor's monthly outage report (blockage and overflow information) will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25<sup>th</sup> of each month for the previous month. Outage reports shall be submitted to:

171st ARW/CES  
Base civil Engineer  
300 Tanker Road #4217  
Coraopolis, PA 15108-4217  
412-474-7614

3. Infiltration and Inflow Report. If required by Paragraph C.3, the Contractor shall submit an Infiltration and Inflow report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25<sup>th</sup> of each month for the previous month. System efficiency reports shall be submitted to:

171st ARW/CES  
Base civil Engineer  
300 Tanker Road #4217  
Coraopolis, PA 15108-4217  
412-474-7614

## **J8.7 Infiltration and Inflow (I&I) Projects**

IAW Paragraph C.3, Utility Service Requirement, the following projects have been implemented by the Government for managing and monitoring I&I.

- None

## **J8.8 Service Area**

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the 171st ARW boundaries.

## **J8.9 Off-Installation Sites**

No off-installation sites are included in the sale of the 171st ARW wastewater system.

## J8.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 5** provides a listing of service connections and disconnections required upon transfer.

**TABLE 5**  
Service Connections and Disconnections  
*Wastewater System 171st ARW, PA ANG*

Location	Description
None	No new connections or disconnections are anticipated upon the transfer of ownership

## J8.11 Government Recognized System Deficiencies

**Table 6** provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the 171st ARW wastewater system. If the utility system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewal and Replacement Plan process and will be recovered through [Schedule L-3](#). Renewal and Replacement projects will be recovered through [Sub-CLIN AC](#).

**TABLE 6**  
System Deficiencies  
*Wastewater System 171st ARW, PA ANG*

Project Location	Project Description
None.	